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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,247	09/17/2001	Geert Fieremans	112740-289	8622
29177	7590	05/05/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC			MURPHY, RHONDA L	
P. O. BOX 1135			ART UNIT	
CHICAGO, IL 60690-1135			PAPER NUMBER	

2667

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,247

Applicant(s)

FIEREMANS, GEERT

Examiner

Rhonda Murphy

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 8-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-7 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☒ Claim(s) 8-10 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/26/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, drawn to determining network topologies by transmitting a request message, classified in class 370, subclass 254.
 - II. Claims 8-10, drawn to visualizing network topologies by developing a tree structure, classified in class 703, subclass 1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different invention I (claims 1-7) is directed to a method for ascertaining network topologies, by transmitting a request message and storing the network topology information, while invention II (claims 8-10) is directed to a method for visualizing a network topology, by developing a network topology in the form of a tree structure.

3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Patricia King Schmidt on April 27, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-7. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 8-10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Desnoyers et al. (US 6,791,948).

Regarding claim 1, Desnoyers teaches transmitting a request message from a first network node (Fig. 1, computer 12(1)) to at least one second network node (switching node 11(1)) connected to the first network node (col. 6, lines 38-41); entering, via the second network node, an associated node number in the network into the request message (col. 6, lines 41-52); forwarding, via the second network node, the request message to at least one third network node (switching node 11(6)) connected to the second network node (col. 6, lines 66-67, col. 7, lines 1-7); forwarding the request message until all network nodes arranged in the network and all connecting lines connecting the network nodes have been passed through (col. 9, lines 54-58); transmitting the request message back to the first network node (col. 10, lines 31-34); and storing the network topology information available in the form of the node number entered in the request message (col. 10, lines 31-34; the request message contains the node identification numbers – refer to col. 9, lines 43-47).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desnoyers in view of Elliott (US 6,456,599).

Regarding claim 5, Desnoyers teaches transmitting the request message through a connection within the network. Desnoyers fails to explicitly teach the connection as a signaling connection. However, it is well known in the art that the request messages are sent via signaling connections.

Furthermore, Elliott teaches nodes in a communication network transmitting a message via a signaling connection within the network (col. 4, lines 41-64).

In view of this, it would have been obvious to one skilled in the art to modify Desnoyers' system by including a signaling connection to transmit the request message, so as to reduce bandwidth usage in transmission of the request messages.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desnoyers et al. (US 6,791,948).

Regarding claim 6, Desnoyers teaches network topology information, including the node numbers, stored in a database (col. 7, lines 26-30) and switching nodes including routing tables (col. 12, lines 51-56).

Desnoyers fails to explicitly teach the information stored in tabular form.

However, it is well known in the art that information stored in a database is stored in tabular form, which indicates the node numbers in the request message are converted into an entry of the table.

In view of this, it would have been obvious to one skilled in the art to include a table that stores information in tabular form, for the purpose of maintaining a record of node identifications in a specific order to accurately represent the network topology.

Regarding claim 7, Desnoyers further teaches the table stored in a central data processing device (database 33) connected to the first network node (col. 7, lines 26-30).

Allowable Subject Matter

9. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 2, prior art fails to disclose the third network node entering an associated node number of the third network node again, into the request message, in cases where the node number of the third network node has already been entered in the request message and the third network node sending the request message back to the second network node.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Synder et al. (US 6,667,960) discloses a protocol for identifying components in a point-to-point computer system.

*Stephens et al. (US 6,347,079) discloses apparatus and methods for path identification in a communication network.

*Liang et al. (US 5,732,086) discloses a system and method for determining the topology of a reconfigurable multi-nodal network.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

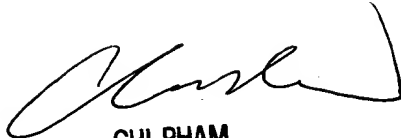
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy
Examiner
Art Unit 2667

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CHI PHAM
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